A. Mehta

1638

RAW SEQUENCE LISTING

DATE: 01/14/2002 TIME: 15:18:06

PATENT APPLICATION: US/09/645,337

Input Set : A:\104701.01 Sequence Listing.txt
Output Set: N:\CRF3\01112002\1645337.raw

5 <110> APPLICANT: Wu Dr., Keqiang 7 Miki Dr., Brian L 9 Tian Dr., Lining 11 Brown Dr., Dan 14 <120> TITLE OF INVENTION: Repressing Gene Expression in Plants 17 <130> FILE REFERENCE: 104107.01 ENTERED 20 <140> CURRENT APPLICATION NUMBER: 09/645,337 22 <141> CURRENT FILING DATE: 2000-08-25 26 <150> PRIOR APPLICATION NUMBER: US 09/383,971 28 <151> PRIOR FILING DATE: 1999-08-27 32 <160> NUMBER OF SEQ ID NOS: 11 36 <170> SOFTWARE: PatentIn Ver. 2.0 40 <210> SEQ ID NO: 1 42 <211> LENGTH: 1807 44 <212> TYPE: DNA 46 <213> ORGANISM: Arabidopsis thaliana 50 <400> SEQUENCE: 1 54 agagateate geagettete eteegaceat ttgaetgega etgtgattae aacacaeegt 120 56 tgatcctacg aaaaagaggt aatggatact ggcggcaatt cgctggcgtc cggacctgat 180 58 ggtgtgaaga ggaaagtttg ttatttctat gaccctgagg tcggcaatta ctactatggc 240 60 caaqqteate ecatgaagee ecategeate egeatgaeee atgeeeteet egeteactae 300 62 ggtctccttc agcatatgca ggttctcaag cccttccctg cccgcgaacg tgatctctgc 360 64 egetteeaeg eegaegaeta tgtetetttt eteegeagea ttaeecetga aaceeageaa 420 66 gatcagattc gccaacttaa gcgcttcaat gttggtgaag actgtcccgt ctttgacggc 480 68 ctttattcct tttgccagac ctatgctgga ggatctgttg gtggctctgt caagcttaac 540 70 cacggcetet gegatattge cateaactgg getggtggte tecateacge taagaagtge 600 72 gaggeetetg gettetgtta egteaatgat ategtettag etateetaga geteettaag 660 74 cagcatgage gtgttettta tgtegatatt gatateeace aeggggatgg agtggaggag 720 76 gcattttatg ctactgacag ggttatgact gtctcgtttc ataaatttgg tgattacttt 780 78 cccggtacag gtcacattca ggatataggt tatggtagcg gaaagtacta ttctctcaat 840 80 gtaccactgg atgatggaat cgatgatgag agctatcatc tgttattcaa gcccatcatg 900 82 gggaaagtta tggaaatttt ccgaccaggg gctgtggtat tgcaatgtgg tgctgactcc 960 84 ctatctgggg atcggttagg ttgcttcaat ctttcaatca aaggtcatgc tgagtgcgtc 1020 86 aaatttatga gatcgttcaa tgttccccta ctgctcttgg gtggtggtgg ttacactatc 1080 88 cgcaatgttg cccgttgctg gtgctacgag actggagttg cacttggagt tgaagttgaa 1140 90 gacaagatgc cggagcatga atattatgaa tactttggtc cagactatac acttcacgtt 1200 92 getecaagta acatggaaaa taagaattet egteagatge tigaagagat tegeaatgae 1260 94 cttctccaca atctctctaa gcttcagcat gctccaagtg taccatttca ggaaagacca 1320 96 cetgatacag agactecega ggttgatgaa gaccaagaag atggggataa aagatgggat 1380 98 ccggattcag acatggatgt tgatgatgac cgtaaaccta taccaagcag agtaaaaaga 1440 100 qaaqctqttg aaccagatac aaaggacaag gatggactga aaggaattat ggagcgtgga 1500 102 aaaggttgtg aggtggaggt ggatgagagt ggaagcacta aggttacagg agtaaaccca 1560 104 gtgggagtgg aggaagcaag tgtgaaaatg gaagaggaag gaacaaacaa gggtggggcg 1620 106 gagcaggcgt ttcctcctaa aacataagac tcggagcttc taatttcttg ctactttttc 1680 108 tgtctatcaa atgttgctag ttaagtttct ggagttgttg ttgttgtaag cactcctctg 1740

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			ENGT!														
			YPE:		J 4												
			RGAN		Arab	o i doi	osis	tha:	liana	1							
			EQUE			0.40	-010										
			Thr			Asn	Ser	Leu	Ala	Ser	Glv	Pro	Asp	Glv	Val	Lvs	
130	1	пър	1111	OII	5	1,511	UCI	псч		10	011		пор	017	15	270	
		LVG	Val	Cvs	_	Phe	Tvr	Asn	Pro		Va l	Glv	Asn	Tvr		Tvr	
136	1119	БуБ	70.1	20	• <u>y</u> -	1 110	1 1 1		25	014	,	GII		30	- 1 -	- 1 -	
	Glv	Gln	Gly		Pro	Met	Lvs	Pro		Ara	Tle	Ara	Met		His	Ala	
142	OI I	0111	35		110		110	40		9		9	4.5				
	Leu	Leu	Ala	His	Tvr	Glv	Leu	Leu	Gln	His	Met	Gln	Val	Leu	Lvs	Pro	
148		50			- 1 -	1	55					60			4		
	Phe		Ala	Arq	Glu	Arg	Asp	Leu	Cys	Arq	Phe	His	Ala	Asp	Asp	Tyr	
154	65			-*		70			1		75			-	•	80	
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160					85					90				-	95		
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184	145					150					155					160	
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	Glu	Ala	Phe	Tyr	Ala	Thr	Asp		Val	Met	Thr	Val		Phe	His	Lys	
202			195					200				_ •	205		~ 1	_	
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208		210	_ ,	_	_	_	215	_	_		_	220	_	_	a 1	* 1	
	_	Ser	Gly	Lys	Tyr		Ser	Leu	Asn	Val		Leu	Asp	Asp	GLY		
	225		a.1			230	.	T	D)	T	235	T 1.	14 - F	a 1	T	240	
	Asp	Asp	Glu	ser		HIS	Leu	Leu	Pne		Pro	rre	мес	GTÀ		Val⊥	
220	11.1	a 1	т1.	Dl	245	D	a1	710	11 n 1	250	т о	Cln	C	c1	255	A an	
	мет	GIU	Ile			Pro	СТА				Leu	GIII		270	Ald	Asp	
226	C = 10	Tax	Can	260		7 200	Т о		265 Cv:		n a n	Lou			Lva	C1+r	
	ser	Leu	Ser	СТУ	ASP	Arg	Leu		Cys	Pne	ASII	Leu		116	гуз	GTÀ	
232	шіс	3.1 ~	275	Cva	Wal	Lvc	Dha	280 Mot	Ara	cor	Dha	λαν	285 Val	Dro	Lou	Lau	
	птБ	290	Glu	СУБ	val	цуѕ	295	Met	Arg	261	rne	300	val	PLO	Leu	ьеи	
238	Lou		Gly	Clu	Clu	Clu		Thr	Tlo	Δησ	Men		Δla	Δra	Cve	Trn	
244		ьец	GIY	ату	атХ	310	туг	1111	116	ary	315	v u ı	AIU	AT 9	U J S	320	
		Tur	Glu	Thr	Glv		Ala	Leu	Glv	Va l		Va 1	Glu	Asp	Lvs		
250	Cy 3	1 Y 1	Gru	1111	325	VUL	1110	n-u	OIY	330	JIU	• u _	JIU	.,,,,,	335		
	Pro	Glu	His	Glu		Tvr	Glu	Tvr	Phe		Pro	Asp	Tvr	Thr		His	
407	110	Jiu	1110	JIU	- 1 -	* 1 ±	U + U	- 1 -		J + 1	110		- 1 -		204		

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266	Glu	Ile	Arg	Asn	Asp	Leu		His	Asn	Leu	Ser	-	Leu	Gln	His	Ala	
268		370					375					380					
272	Pro	Ser	Val	Pro	Phe	Gln	Glu	Arg	Pro	Pro	Asp	Thr	Glu	Thr	Pro	Glu	
274	385					390					395					400	
278	Val	Asp	Glu	Asp	Gln	$\operatorname{Gl} u$	Asp	Gly	Asp	Lys	Arg	Trp	Asp	Pro	Asp	Ser	
280					405					410					415		
284	Asp	Met	Asp	Val	Asp	Asp	Asp	Arg	Lys	Pro	Ile	Pro	Ser	Arg	Val	Lys	
286	-		•	420	•	-	-		425					430		-	
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298		450	GIG	1119	Oly	Буб	455	Cy 5	Olu	,	014	460	1106	Olu	501	0.7	
	ser		Luc	Va l	Thr	Clv		Aen	Pro	Val	Glv		clu	Glu	Δla	Ser	
	465	1 111	цуз	ACLT	1111	470	V CA I	поп	110	VUL	475	Val	Olu	OLU	niu	480	
	Val	Та	Mot	C1.0	<i>C</i> 1		C1	The	Man	Tira		Clar	λla	Clo	Cln		
	vai	ьуѕ	мес	GIU		GIU	GTÀ	1111	ASII		СТА	СТУ	ніа	GIU		Ата	
310	D. l	5	D	T	485					490					495		
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																cgatg	
																gtcgc	
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																ıctgca	
358	cgaa	acct	caa g	ggega	ittca	a to	rtege	gtgag	gat	tgtc	cctg	tctt	cgac	egg a	acttt	ttgat	480
360	tttt	gcc	gtg d	ettec	gaag	g ag	gtto	ctatt	ggt	getg	jecg	tcaa	atta	aa c	cagac	aggac	540
362	gctg	jatat	.cg d	ctato	aatt	g gg	gege	jtggg	ctt	caco	catg	ctaa	igaaa	ag (cgagg	rcttct	600
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																tttac	
																gaact	
																cacta	
																aggtt	
374																gtggt	
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																aactc	
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		T lo	Cln	Tuc	Val		Clu	17 - 1	Tur	Clo		Clu	Λ1а	Val	Wal	Leu	Gln	
		116	GIII	гуз		rie c	GIU	val	гут		r. r.O	GIU	AIU	VIAL		LC.u	0111	
	526				260					265				_	270	_	_	
		Cys	Gly		Asp	Ser	Leu	ser	Gly	Asp	Arg	Leu	GIY		Phe	Asn	Leu	
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	536	Ser	Val	Lys	Gly	His	Ala	Asp	Cys	Leu	Arg	Phe	Leu	Arg	Ser	Tyr	Asn	
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		Val	Pro	Leu	Met	Val	Len	Glv	Glv	Glu	Glv	Tvr	Thr	Ile	Ara	Asn	Val	
	544		110	Lea	1100		310	G L 1	011	014	021	315)		320	
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	550					325			_		330	_		- •		335	_	
	554	Asp	Asn	Lys		Pro	Tyr	Asn	Glu	_	Phe	Glu	Tyr	Phe		Pro	Asp	
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	568	ЦуЗ	370	1100	Olu	9	1.10	375		1 111	2.00		380				1	
		T		11: -	3 1 -	D == 0	C = =		015	Dha	015	III a		Dro	nro	V-1	A an	
			ше	HIS	Ala	PIO		vai	GIII	Pne	GIII		TiiT	PIO	PIO	Val		
	574						390					395		_	_	_	400	
		Arg	Val	Leu	Asp	Glu	Pro	Glu	Asp	Asp		GLu	Thr	Arg	Pro	Lys	Pro	
	580					405					410					415		
w>	584	Arg	Xaa	Trp	Ser	Gly	Thr	Ala	Thr	Tyr	Glu	Ser	Asp	ser	Asp	Asp	Asp	
	586	-		_	420	_				425					430			
	590	Asp	Lvs	Pro	Leu	His	Glv	Tvr	Ser	Cvs	Ara	Glv	Glv	Ala	Thr	Thr	Asp	
	592	F	272	435			1	- 1 -	440	- 2 -	,	_	_	445				
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		Arg		<i>5</i> e1	1 111	GIY	GIU	455	GIU	Mec	изр	дор	460	HOH	FIO	Olu	110	
	598		450					4))					400					
		_		_	_	_	~											
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	604 610 612 614 616 620 622 624 626 630 632 634	465 <210 <211 <212 <213 <400 cace ggaa cace cate cage ggaa gaa gaa gaa)> SE > LE > TY > SE cgto tttga tttaaa ctttt gtgt	EQ IDENGTHER COMMENT OF THE COMENT OF THE COMMENT OF THE COMMENT OF THE COMMENT OF THE COMMENT O	D NO: H: 93 DNA ISM: NCE: Laaaa Ltaaa Ltggca Ltggc Itggt	5 39 Arak 5 aateo itego itego itego igago	oidor ct ct gg aa ct tg ca ga gt at gg at ga ag	Ser osis cettt agec gaga acet tega acaa	ettet eagtt eagtt eagtt eaact eact	caa aca aaa ctg gag ccc	acctt agtga aaca gggaa gtttg caaca	ictc laga lctc lagc lttg	aggg tato ttto agco ctgo	lagaa gagag gact tcac acaa caaa	igg of the state o	catto tgtgo gaaca ttggo ctatt tgtao	ettate ecttta itecet igaaaa ectgag jetaaa	120 180 240 300 360 420
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/645,337 11ME: 15:18:07

DATE: 01/14/2002

Input Set : A:\104701.01 Sequence Listing.txt

Output Set: N:\CRF3\01112002\I645337.raw

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